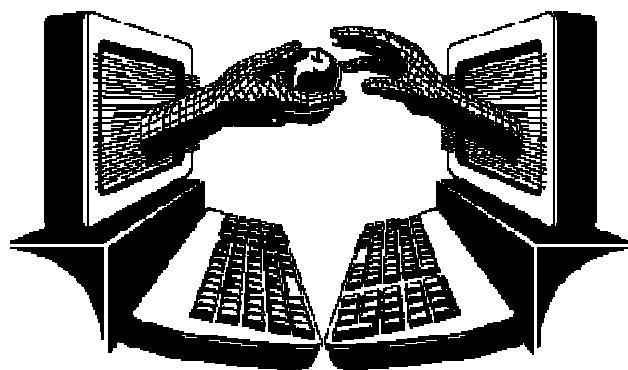


Review of the Kansas Dental Board Professional Data

2000

Health Care Data Governing Board

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July 2002

Review of the Kansas Dental Board Professional Data

2000

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Executive Summary

The principle findings of this report:

Dentists

- There are 1,789 dentists licensed to practice in Kansas with 1,269 dentists having a primary office located in Kansas.
- There are 1,499 total practice locations in Kansas. This includes all dentists with a practice location in Kansas.
- Among Kansas counties, 10 have no dentist practicing within their borders.
- Of Kansas dentists, 86.4% are primary care dentists. Of the specialty dentists, 80% are located in Urban and Semi-Urban Regions, 15.3% in the Densely-Settled Rural Region, and less than 5% in Rural and Frontier Regions.
- Of the dentists in Kansas, 8.4% work part-time with a higher percentage (11.1%) in both the Rural and Frontier Regions.
- As expected, the Urban and Semi-Urban Regions have a lower population/dentist ratio than the Kansas average (2,661.68). The Rural Region had the highest ratio at 5,688.35.
- Dentist that are fifty years old or older make up 41.7% of the dentists practicing in Kansas.

Hygienists

- There are 1,468 hygienists licensed to practice in Kansas with 1,100 working in an office located in Kansas.
- There are 1,352 total locations in Kansas where hygienists practice.
- Among Kansas counties, 30 have no practicing dental hygienists within their borders.
- Less than 6% of the hygienists licensed by the Kansas Dental Board are in Rural and Frontier Regions. Of the hygienists working in Rural and Frontier Regions, a higher percentage work part-time (43.2% and 66.7%) where the state average is 35.8%.
- In Kansas, 14.7% of the practicing hygienists are fifty years old or older.

Introduction

This document “Review of the Kansas Dental Board Professional Data, 2000” is part of a series of publications requested by the Health Care Data Governing Board (HCDGB) to make information available about the health care system in the state of Kansas. A brief summary regarding this request for an inventory of health care professionals, of which this document is a part, can be found in the series preface at the beginning of the associated notebook.

Information presented in this document provides an overview of the health professionals licensed by the Kansas Dental Board, specifically dentists and dental hygienists. Dentists are licensed for General Dentistry, and the following specialties as listed in the Kansas Administrative Regulations (K.A.R) 71-2-2: Oral Surgery, Orthodontics, Prosthodontics, Pediatric Dentistry, Periodontics, Public Health Dentistry, and Endodontics.*

The data provided by the Kansas Dental Board includes information on the number and locations of practice sites, the average hours worked per year, the average hours worked at each practice location per week and the number of weeks worked per year. This has allowed the Office of Health Care Information (OHCI) to calculate full-time equivalency (FTE) for dentists who provided primary care in the state of Kansas. A list of the data fields provided to the Health Care Data Governing Board’s Health Care Professional Database is provided in Appendix A, Table A. The FTE methodology is explained in Appendix A, Table B. Population data used in the report is taken from the 2000 Census; adjusted population equals total population minus the population living in group quarters.

* See pages 5-6 for specialty definitions.

Dental Professionals

The Kansas Dental Board licenses dental professionals by ten practice types:

EN	Endodontics
GE	General Dentistry
HY	Hygienist
OR	Orthodontics
OS	Oral Surgery
PE	Pediatrics
PH	Public Health
PI	Periodontics
PR	Prosthodontics
TE	Teaching

In 2000, the Kansas Dental Board licensed 3,258 dental professionals (dentists and hygienists). There are 1,789 dentists and 1,468 dental hygienists. Of the licensed dentists, General Dentistry (GE) and Pediatrics (PE) are specialties referred to as primary care.

Dentist Demographics

Practice Locations

In 2000, 1,388 dentists reported that they had at least one practice location in Kansas. Of those, 1,269 dentists reported that their primary practice location was in Kansas (see Table 1). There were 520 dentists licensed in Kansas while their primary practice was located in another state (see Tables 1 and 2). Dentists practicing at a primary or another office in Kansas make up 77.6% of the dentists licensed by the Kansas Dental Board. The total number of practice locations in Kansas is 1,499. This includes all dentists with a practice location in Kansas. On the following page is a map (Figure 1) that shows total dentist locations by county.

Table 1: Dentists Licensed in Kansas

Kansas Licensed Dentists practicing at a primary office in KS	1,269	70.9%
Kansas Licensed Dentists practicing at a primary office in other states	520	29.1%
Kansas Licensed Dentists practicing in KS	1,388	77.6%
Kansas Licensed Dentists	1,789	

Table 2: Licensed Dentists by State by Primary Office

Kansas	1,269
Oklahoma	31
Missouri	213
Colorado	35
Nebraska	17
Other States	224
Total	1,789

In 1999, Kansas ranked 32nd based on population per dentist. This ranking takes into account all dentists practicing in Kansas. This was not a ranking based on dental full-time equivalence (FTE) information. The national average for population per dentist was 1,658 and Kansas was 1,976 (see Appendix A, Table C). National rankings for 2000 have not yet been published by the American Dental Association. See page 9 for more information on dental full-time equivalency.

In evaluating and comparing staffing of professionals, counties in Kansas have been grouped into 5 Regions. These Regions are based upon population density as adopted by the Office of Local and Rural Health (OLRH), Division of Health, Kansas Department of Health and Environment.

They are:

Urban	150.0 or more persons per sq. mi.
Semi-Urban	40.0 - 149.9 persons per sq. mi.
Densely-Settled Rural	20.0 - 39.9 persons per sq. mi.
Rural	6.0 - 19.9 persons per sq. mi.
Frontier	Less than 6.0 persons per sq. mi.

where...

$$\text{Population Density} = \text{Total Population} / \text{Land Area in Square Miles}$$

These divisions are based upon the 2000 census report to determine number of persons per square mile. The counties making up each region and their population densities are mapped in Figure 2 on the next page and listed in Appendix A, Table E.

Certification Specialties

General Dentistry (GE): the practice and teaching of comprehensive preventive and therapeutic oral health care.

The recognized branches of dentistry for which application may be made for a specialist's certificate are as follows:

Endodontics (EN): the morphology, physiology and pathology of the human dental pulp and periradicular tissues, including the diagnosis, prevention and treatment of diseases and injuries of the pulp and associated periradicular conditions.

Orthodontics (OR): the diagnosis, supervision, guidance and treatment of the growing and mature dentofacial structures, including those conditions that require movement of teeth and the treatment of malrelationships and malformation of the craniofacial complex.

Oral Surgery (OS): the diagnosis, surgical and adjunctive treatment of disease, injuries and defects of the oral region.

Pediatric Dentistry (PE): the practice and teaching of comprehensive preventive and therapeutic oral health care for children from birth through adolescence.

Public Health Dentistry (PH): the preparation, promotion, initiation, and execution of dental programs designed to prevent or control diseases and anomalies of the teeth and other tissues and structures of the mouth.

Periodontics (PI): the diagnosis, and treatment of diseases and conditions of the supporting and surrounding tissues of the teeth or their implanted substitutes.

Prosthodontics (PR): the restoration and maintenance of oral function, comfort, appearance and health of the patient by restoring natural teeth or replacement of missing teeth and contiguous oral or maxillofacial tissues with artificial substitutes (K.A.R. 71-2-2).

The number of dentists by practice type with a primary office in Kansas are shown in Table 3. General dentistry has the highest percentage of dentists (84.7%) with orthodontics second at 5.4%.

Table 3: Dentist Specialties in Kansas

Endodontics	22	1.7%
General Dentistry	1,075	84.7%
Orthodontics	68	5.4%
Oral Surgery	46	3.6%
Pediatrics	21	1.7%
Public Health	0	0.0%
Periodontics	29	2.3%
Prosthodontics	8	0.6%
Teaching	0	0.0%
Dentist Total	1,269	100.0%

Of the specialties listed, GE and PE are known as primary care fields. Of dentists practicing in an office in Kansas, only two non-primary care specialties are represented in the Rural Region and only one non-primary care specialty is represented in Frontier Region (see Table 4, page 8).

Table 4: Dentist Offices by Region

	Urban	S-Urban	DS	Rural	Frontier	Total
PE	16	6	0	0	0	22
GE	638	163	186	114	30	1,131
OR	57	22	21	9	0	109
EN	20	1	1	0	0	22
OS	36	15	11	0	1	63
PH	0	0	0	0	0	0
PI	25	4	3	1	0	33
PR	8	0	0	0	0	8
TE	0	0	0	0	0	0
Total	800	211	222	124	31	1,388
Total w/GE & PE	57.6%	15.2%	16.0%	9.0%	2.2%	100%
Total wo/ GE &	62.1%	17.9%	15.3%	4.3%	0.4%	100%

Education

Of the 1,269 dentists with their primary office in Kansas, 96.8% have a Doctorate of Dental Science (DDS) degree while 2.8%, or 36, have a Doctor of Dental Medicine (DMD) degree (see Table 5). Other degrees recognized by the State of Kansas are: LDS - Licentiate in Dental Surgery, BDS - Bachelor of Dental Surgery, and MDS - Master of Dental Surgery (K.S.A. 65-1446).

Table 5: Dentists by Education

DDS	1,229	96.8%
DMD	36	2.8%
BDS	3	0.2%
MDS	1	0.1%
Total	1,269	100.0%

Gender

Of the 1269 dentists with a primary office in Kansas, 143 or 11.3% were female. The only region dramatically different from that average is the Rural region where 5.1% of the dentists are female (see Table 6).

Table 6: Dentists by Gender by Region

	Urban	Percent	S-Urban	Percent	DS Rural	Percent	Rural	Percent	Frontier	Percent	Total	Percent
Female	100	13.0%	16	8.3%	18	9.9%	5	5.1%	4	14.8%	143	11.3%
Male	670	87.0%	176	91.7%	163	90.1%	94	94.9%	23	85.2%	1,126	88.7%
Total	770	100.0%	192	100.0%	181	100.0%	99	100.0%	27	100.0%	1,269	100.0%

Ethnic Origin

Of the dentists with primary offices in Kansas, 4.3% indicated a minority ethnic origin, 8.0% did not indicate an ethnic origin, and 87.6% indicated they were white (see Table 7).

Table 7: Dentists by Ethnic Origin

Asian/Pac. Islander	26	2.0%
Black	17	1.3%
Native American	4	0.3%
Other	9	0.7%
White	1,112	87.6%
Missing	101	8.0%
Total	1,269	100.0%

Work Status

Of the dentists with primary offices in Kansas, 8.4% work part-time (20 hours per week or less). The Rural and Frontier Regions have a higher percentage of part-time dentists than the other regions (see Table 8).

Table 8: Dentists by Work Status by Region

	Urban Percent n	S- Percent Urban	DS Rural Percent	Rural Percent	Frontier Percent r	Total Percent t
Full-Time	704 91.2%	174 91.1%	172 95.6%	88 88.9%	24 88.9%	1,166 91.6%
Part-Time	68 8.8%	17 8.9%	8 4.4%	11 11.1%	3 11.1%	107 8.4%
Total	772 100.0 %	191 100.0%	180 100.0 %	99 100.0%	27 100.0%	1,273 100.0 %

Age

Only 58.3% of the dentists in Kansas are forty nine years old or younger, with 41.7% fifty years or older (see Table 9).

Table 9: Dentists by Age

40 and under	326	25.7%
41-49	414	32.6%
50 - up	529	41.7%
Total	1,269	100.0%

Dentist Full-Time Equivalence

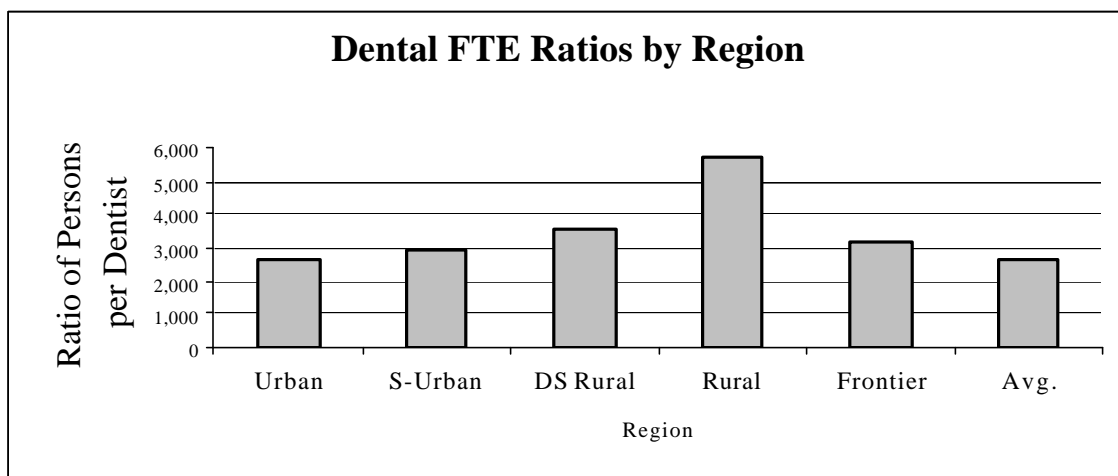
The Kansas Dental Board provided sufficient data on practice locations and the average number of hours worked at each practice location to allow for the calculation of the primary care dental full-time equivalencies (FTE). FTEs provide a more accurate representation of the distribution of dental services in Kansas by evaluating the location of dental practices and the number of hours on average that dental services were available in each location. FTEs were calculated only for primary care dentists, dentists who specialize in general or pediatric dentistry. This excludes dentists employed by State or Federal institutions. Kansas provided a total of 979.26 dentist FTEs. There were 10 counties whose dental FTEs were zero: Barber, Chase, Elk, Haskell, Hodgeman, Lane, Rawlins, Wallace, Washington, and Wichita. The ratio of population per FTE dentist was 2,661.68 for the State of Kansas. There were 26 counties having a lower ratio, and therefore expected to receive better dental coverage than the rest of the state (see Figure 3).

The ratio of population per FTE Dentist in Kansas was 2,661.68 (see Table 10). The ratio for Urban and Semi-Urban Regions were below the state average and the Densely-Settled Rural, Rural and Frontier Regions were above the state average with Rural being the highest (see Figure 4, page 11). For further information on the FTE methodology see Appendix A, Table B.

Table 10: Dentist FTE and Population/FTE Ratio

	FTE	Adjusted Pop. 2000	Pop/FTE Ratio	Count
Urban	569.12	1,305,212	2,624.69	667
S-Urban	138.68	394,143	2,891.89	164
DS	162.17	521,760	3,554.23	186
Rural				
Rural	86.46	288,802	5,688.35	112
Frontier	22.82	96,550	3,233.86	32
Avg.	979.26	2,606,468	2,661.68	1,161

Figure 3



Dental Hygienist Demographics

Practice Locations

In 2000, there were 1,159 Kansas licensed hygienists reported they had at least one practice location in Kansas. Of those, 1,100 hygienists reported that their primary practice location was in Kansas (see Table 11).

There were 368 hygienists licensed by Kansas Dental Board, while their primary practice was located in another state (see Table 11 and 12). Hygienists practicing at an office in Kansas make up 79% of the hygienists licensed by the Kansas. The total number of hygienists practicing at an office in Kansas is 1,352. Thirty counties have no practicing hygienists. A mapped distribution of hygienists by county is shown on the next page (see Figure 5).

Table 11: Hygienists Licensed in Kansas

Kansas Licensed Hygienists practicing at a primary office in KS	1,100	74.9%
Kansas Licensed Hygienists practicing at a primary office in other states	368	25.1%
Kansas Licensed Hygienists practicing at an office in KS	1,159	79.0%
Kansas Licensed Hygienists	1,468	

Table 12: Licensed Hygienists by State by Primary Office

Kansas	1,100
Oklahoma	18
Missouri	159
Colorado	16
Nebraska	10
Other States	165
Total	1,468

Rural and Frontier Regions have only 6% of the state's hygienists practicing in those counties (see Table 13).

Table 13: Hygienists by Region

	Urban	S-Urban	DS Rural	Rural	Frontier	Total
Hygienists	786	147	157	55	14	1,159
Percent to Total by Region	67.8%	12.7%	13.5%	4.8%	1.2%	100%

Education

Registered Dental Hygienist (RDH) is a licensed member of the oral health care team who provides treatment to prevent oral disease. The dental hygienist also instructs patients on methods to improve and maintain optimal oral health. The majority of Hygienist, 78.5% have completed a two-year program with an associate degree and completed the state and national examinations to receive their license (RDH, AS). Of dental hygienists, 21.1% have completed a Bachelor of Science Degree in Dental Hygiene (RDH, BS), and less than 1% have completed a Masters of Science Degree in Dental Hygiene (RDH, MS), (see Table 14).

Table 14: Hygienists by Education

RDH, AS	864	78.5%
RDH, BS	232	21.1%
RDH, MS	2	0.2%
Missing	2	0.2%
Total	1,100	100.0%

Gender

Of the 1,100 hygienists with their primary office in the state of Kansas, 98.7% were female (see Table 15).

Table 15: Hygienists by Gender

Female	1,086	98.7%
Male	14	1.3%
Total	1,100	100.0%

Ethnic Origin

Of the dental hygienists with primary offices in Kansas, 2.1% indicated a minority ethnic origin, 14.9% did not indicate an ethnic origin, and 83% indicated they were white (see Table 16).

Table 16: Hygienists by Ethnic Origin

Asian/Pac. Islander	7	0.6%
Black	3	0.3%
Native American	1	0.1%
Other	12	1.1%
White	913	83.0%
Missing	164	14.9%
Total	1,100	100.0%

Work Status

In Kansas, 35.8% of the hygienists work part-time (20 hours per week or less). The Frontier Region has a significantly higher percentage than the other regions at 66.7% (see Table 17).

Table 17: Hygienists by Work Status by Region

	Urban Percent	S-Urban Percent	DS Rural Percent	Rural Percent	Frontier Percent	Total Percent
Full-Time	497 64.2%	97 69.8%	89 63.6%	25 56.8%	4 33.3%	712 64.2%
Part-Time	277 35.8%	42 30.2%	51 36.4%	19 43.2%	8 66.7%	397 35.8%
Total	774 100.0%	139 100.0%	140 100.0%	44 100.0%	12 100.0%	1,109 100.0%

Age

In Kansas, 86.6% of the hygienists are forty nine years old and under, with 13.4% fifty years old or greater (see Table 18).

Table 18: Hygienists by Age

40 and under	598	54.4%
41-49	355	32.2%
50 and up	147	13.4%
Total	1,100	100.0%

Bibliography

American Dental Association, Survey Center, 1999 Distribution of Dentists in the United States by Region and State, 1999, Table 1.

Kansas Dental Board, Kansas Administrative Regulations 71-2-2.

Regulation of Dentists and Dental Hygienists, Kansas Statutes Annotated 65-1446.

Office of Health Care Information, Health Care Governing Board, Kansas Department of Health and Environment, Kansas Primary Care Dentist FTE Report by County, 2000.

“Population Density Peer Groups”, Office of Local and Rural Health.

Appendix A

**Table A: Data Submitted to the Health Care Database
by the Kansas Dental Board**

License Number
Social Security Number
Name
Previous Name
Street Address
City
State
County
Zip Code
Address Type
Practice Type
Date License Issued
Date License Expires
Date of Last License Renewal
Date of Original License
License Status
Degree
Graduation Date
College
Gender
Date of Birth
Race
Number of Hours per Week Worked
Hours Worked-Administrative
Hours Worked-Patient Care
Hours Worked-Research
Hours Worked-Teaching
Hours Worked-Other
Hours Worked-Total
Number of Weeks per Year Worked

Note: A separate record is maintained for each address that a dentist or hygienists reports, including home, primary office and additional offices.

Table B: Kansas Primary Care Dentist FTE Report by County 2000: Full-Time Equivalence Methodology

The calculation of dentist full-time equivalence (FTEs) and ratios was prepared according to guidelines set forth by the Code of Federal Regulations, Public Health, Parts 1 to 399, Revised as of October 1, 1996, Public Health Service Act, Part 5, Designation of Health Professional(s) Shortage Areas.

- Only General Dentistry (GE) and Pediatric (PE) dentists are included in the report evaluation.
- Only dentists listed as “Active Full-Time” or “Active Part-Time” in the dental licensure database are included. Dentists practicing at correctional institutions, state hospitals, and federal hospitals are excluded.
- Full-time Equivalent: One FTE is based on a 40 hour work week for 52 weeks per year. In cases where a dentist’s total practice hours for all work sites exceeds 40 hours per week the value for total hours is set to 40 and the hours are distributed across all sites in proportion to the actual practice hours. Hours per week practiced at each location are used to allocate a dentist’s FTE to multiple locations. If the value for hours per week is missing, and if the dentist’s status is Active Full-time or Active Part-time, the FTE is imputed according to a methodology described on the next page.
- Adjusted Full-time Equivalence: According to Federal Health Professional Shortage Area Guidelines, dentists’ FTEs should be adjusted to reflect variations in productivity; one measure of dentist productivity is the number of auxiliaries employed by the dentist’s office. Since that type of information was not available an alternative measure of productivity based on age was used. The following table displays the values used to compute age-adjusted FTEs.

Equivalency Weights by Age

Age Group	Weight
Under 55 years	1.2
55 to 59 years	0.9
60 to 64 years	0.8
65+ years	0.6

Due to the weighting, some dentists under age 55 had age-adjusted FTEs greater than 1.0; in no case was the theoretical maximum of 1.20 age-adjusted FTE exceeded.

- The age of each dentist is calculated as of December 31, 2000.
- Population data used in the report is taken from the 2000 Census; adjusted population equals total population minus the population living in group quarters.
- The population/dentist ratio is the adjusted population divided by the age-adjusted FTE; this ratio appears in the Dentist FTE’s, Pop/FTE Ratio, and Rank by County, 2000 (see Appendix A, Table D).

- The dental practice data was verified by the Office of Health Care Information by phone edit if the total number of hours worked per week was missing, or if the hours worked per week per site did not sum to the value for total hours provided by the dentist. Phone edits were completed for an estimated 20% of the dentists who practice in Kansas.

Table C: National Ranking of Number of Persons Per Dentist by State, 1999

States by Alphabetical Listing					States by Ranking				
State	Est. 1999 U.S. Residential Population	Number of Active Dentists,	Population per Dentist	Rank	State	State Population	Number of Active Dentists	Population per Dentist	Rank
Alabama	4,370,000	1903	2,296	47	D.C.	519,000	751	691	1
Alaska	620,000	451	1,375	8	Hawaii	1,185,000	1004	1,180	2
Arizona	4,778,000	2275	2,100	40	New York	18,197,000	15130	1,203	3
Arkansas	2,551,000	1076	2,371	49	Massachusetts	6,172,000	5017	1,230	4
California	33,145,000	22636	1,464	10	New Jersey	8,143,000	6554	1,242	5
Colorado	4,056,000	2790	1,454	9	Connecticut	3,282,000	2611	1,257	6
Connecticut	3,282,000	2611	1,257	6	Maryland	5,172,000	3955	1,308	7
D.C.	519,000	751	691	1	Alaska	620,000	451	1,375	8
Delaware	754,000	352	2,142	41	Colorado	4,056,000	2790	1,454	9
Florida	15,111,000	8034	1,881	30	California	33,145,000	22636	1,464	10
Georgia	7,788,000	3546	2,196	44	Oregon	3,316,000	2236	1,483	11
Hawaii	1,185,000	1004	1,180	2	Illinois	12,128,000	8173	1,484	12
Idaho	1,252,000	656	1,909	31	Pennsylvania	11,994,000	8068	1,487	13
Illinois	12,128,000	8173	1,484	12	Nebraska	1,666,000	1092	1,526	14
Indiana	5,943,000	2850	2,085	38	Washington	5,756,000	3759	1,531	15
Iowa	2,889,000	1557	1,855	28	Utah	2,130,000	1356	1,571	16
Kansas	2,654,000	1343	1,976	32	Minnesota	4,776,000	2918	1,637	17
Kentucky	3,961,000	2214	1,789	25	Vermont	594,000	357	1,664	18
Louisiana	4,372,000	2109	2,073	36	Michigan	9,864,000	5892	1,674	19
Maine	1,253,000	600	2,088	39	Rhode Island	991,000	590	1,680	20
Maryland	5,172,000	3955	1,308	7	Wisconsin	5,250,000	3084	1,702	21
Massachusetts	6,172,000	5017	1,230	4	Virginia	6,873,000	3994	1,721	22
Michigan	9,864,000	5892	1,674	19	New	1,201,000	691	1,738	23
Minnesota	4,776,000	2918	1,637	17	Wyoming	480,000	272	1,765	24
Mississippi	2,769,000	1098	2,522	50	Kentucky	3,961,000	2214	1,789	25
Missouri	5,468,000	2691	2,032	34	Montana	883,000	491	1,798	26
Montana	883,000	491	1,798	26	Ohio	11,257,000	6106	1,844	27
Nebraska	1,666,000	1092	1,526	14	Iowa	2,889,000	1557	1,855	28
Nevada	1,809,000	710	2,548	51	Tennessee	5,484,000	2919	1,879	29
New Hampshire	1,201,000	691	1,738	23	Florida	15,111,000	8034	1,881	30
New Jersey	8,143,000	6554	1,242	5	Idaho	1,252,000	656	1,909	31
New Mexico	1,740,000	784	2,219	46	Kansas	2,654,000	1343	1,976	32
New York	18,197,000	15130	1,203	3	South Dakota	733,000	361	2,030	33
North Carolina	7,651,000	3297	2,321	48	Missouri	5,468,000	2691	2,032	34
North Dakota	634,000	306	2,072	35	North Dakota	634,000	306	2,072	35
Ohio	11,257,000	6106	1,844	27	Louisiana	4,372,000	2109	2,073	36
Oklahoma	3,358,000	1558	2,155	42	Texas	20,044,000	9654	2,076	37
Oregon	3,316,000	2236	1,483	11	Indiana	5,943,000	2850	2,085	38
Pennsylvania	11,994,000	8068	1,487	13	Maine	1,253,000	600	2,088	39
Rhode Island	991,000	590	1,680	20	Arizona	4,778,000	2275	2,100	40
South Carolina	3,886,000	1765	2,202	45	Delaware	754,000	352	2,142	41
South Dakota	733,000	361	2,030	33	Oklahoma	3,358,000	1558	2,155	42
Tennessee	5,484,000	2919	1,879	29	West Virginia	1,807,000	835	2,164	43
Texas	20,044,000	9654	2,076	37	Georgia	7,788,000	3546	2,196	44
Utah	2,130,000	1356	1,571	16	South Carolina	3,886,000	1765	2,202	45
Vermont	594,000	357	1,664	18	New Mexico	1,740,000	784	2,219	46
Virginia	6,873,000	3994	1,721	22	Alabama	4,370,000	1903	2,296	47
Washington	5,756,000	3759	1,531	15	North Carolina	7,651,000	3297	2,321	48
West Virginia	1,807,000	835	2,164	43	Arkansas	2,551,000	1076	2,371	49
Wisconsin	5,250,000	3084	1,702	21	Mississippi	2,769,000	1098	2,522	50
Wyoming	480,000	272	1,765	24	Nevada	1,809,000	710	2,548	51
US	272,709,000	164,471	1,658		US	272,709,000	164,471	1,658	

American Dental Association, Survey Center, (2002).

Table D: Dentist FTEs, Population/FTE Ratio, and Rank by County, 2000

County	FTE	Adjusted Pop. 2000	POP/FTE Ratio	Dentist Count	Rank Based on Ratio	County	FTE	Adjusted Pop. 2000	POP/FTE Ratio	Dentist Count	Rank Based on Ratio
Allen	4.95	14,028	2,833.94	5	33	Linn	2.04	9,439	4,626.96	3	78
Anderson	2.52	7,983	3,167.86	3	51	Logan	2.10	2,989	1,423.33	2	1
Atchison	5.58	15,721	2,817.38	6	31	Lyon	11.00	34,322	3,121.60	13	47
Barber	0.00	5,242	NA	0		Marion	5.22	12,596	2,413.03	6	15
Barton	9.39	27,433	2,920.07	12	40	Marshall	3.80	10,721	2,817.95	5	32
Bourbon	4.15	15,055	3,627.71	5	63	McPherson	9.32	27,917	2,995.39	12	44
Brown	2.56	10,522	4,104.33	3	73	Meade	0.72	4,517	6,273.61	1	85
Butler	18.00	57,472	3,192.89	17	53	Miami	5.94	27,605	4,647.31	7	79
Chase	0.00	2,917	NA	0		Mitchell	1.80	6,587	3,659.44	2	66
Chautauqua	0.60	4,205	7,008.33	1	87	Montgomery	13.09	35,352	2,701.20	15	28
Cherokee	3.70	22,270	6,022.99	5	83	Morris	1.59	6,029	3,791.82	2	69
Cheyenne	1.92	3,111	1,620.31	2	4	Morton	1.35	3,439	2,547.41	2	20
Clark	1.02	2,344	2,298.04	1	10	Nemaha	5.39	10,219	1,897.68	7	7
Clay	2.69	8,657	3,224.21	4	54	Neosho	4.29	16,519	3,850.58	6	70
Cloud	3.30	9,606	2,910.91	3	39	Ness	0.24	3,375	14,062.50	1	93
Coffey	2.66	8,695	3,265.73	4	57	Norton	3.42	5,163	1,509.65	3	2
Comanche	0.27	1,897	7,025.93	1	88	Osage	3.51	16,479	4,701.57	5	80
Cowley	11.90	34,483	2,898.95	13	38	Osborne	1.32	4,333	3,282.58	2	58
Crawford	12.12	36,428	3,005.61	14	45	Ottawa	1.40	5,972	4,273.35	3	76
Decatur	1.05	3,351	3,191.43	1	52	Pawnee	2.86	6,329	2,215.15	4	9
Dickinson	7.35	19,006	2,585.85	9	22	Phillips	1.61	5,858	3,649.84	3	65
Doniphan	0.45	7,858	17,462.22	1	94	Pottawatomie	4.25	17,927	4,218.12	5	75
Douglas	34.59	91,248	2,637.80	39	25	Pratt	3.61	9,322	2,585.85	6	23
Edwards	1.08	3,388	3,137.04	1	49	Rawlins	0.00	2,910	NA	0	
Elk	0.00	3,175	NA	0		Reno	23.30	61,537	2,640.79	29	26
Ellis	13.40	26,248	1,958.81	14	8	Republic	1.92	5,695	2,966.15	2	43
Ellsworth	2.28	5,699	2,499.56	2	19	Rice	3.45	9,882	2,864.35	5	35
Finney	12.27	39,951	3,255.99	12	56	Riley	18.74	53,529	2,855.95	23	34
Ford	10.85	31,676	2,920.79	11	41	Rooks	1.46	5,488	3,771.82	2	68
Franklin	7.87	24,192	3,072.87	10	46	Rush	1.20	3,463	2,885.83	1	37
Geary	11.80	27,336	2,317.59	13	12	Russell	2.92	7,161	2,454.50	3	17
Gove	1.05	3,015	2,871.43	2	36	Saline	16.04	52,154	3,251.24	19	55
Graham	0.72	2,877	3,995.83	1	71	Scott	1.82	5,034	2,773.55	2	30
Grant	2.50	7,838	3,135.20	3	48	Sedgwick	165.98	446,591	2,690.59	192	27
Gray	0.48	5,763	12,006.25	1	92	Seward	6.42	22,096	3,441.74	8	59
Greeley	0.84	1,507	1,794.05	1	6	Shawnee	67.50	164,975	2,443.93	79	16
Greenwood	1.29	7,482	5,800.00	2	81	Sheridan	1.08	2,769	2,563.89	1	21
Hamilton	1.14	2,627	2,304.39	2	11	Sherman	2.67	6,626	2,481.65	3	18
Harper	2.64	6,368	2,412.12	5	14	Smith	1.50	4,427	2,951.33	2	42
Harvey	8.96	31,429	3,507.70	10	60	Stafford	0.69	4,710	6,868.75	1	86
Haskell	0.00	4,272	NA	0		Stanton	0.24	2,351	9,795.83	1	91
Hodgeman	0.00	2,050	NA	0		Stevens	1.98	5,403	2,728.79	2	29
Jackson	2.86	12,426	4,340.96	4	77	Sumner	10.85	25,538	2,354.82	13	13
Jefferson	2.97	18,167	6,116.84	5	84	Thomas	4.95	7,899	1,595.76	6	3
Jewell	0.48	3,746	7,804.17	1	90	Trego	1.02	3,210	3,147.06	2	50
Johnson	257.88	446,108	1,729.89	301	5	Wabaunsee	0.09	6,773	75,255.56	1	95
Kearny	1.10	4,486	4,078.18	2	72	Wallace	0.00	1,724	NA	0	
Kingman	2.25	8,475	3,766.67	2	67	Washington	0.00	6,279	NA	0	
Kiowa	0.42	3,170	7,547.62	1	89	Wichita	0.00	2,506	NA	0	
Labette	5.23	21,978	4,204.30	6	74	Wilson	1.70	10,094	5,937.65	2	82
Lane	0.00	2,132	NA	0		Woodson	1.02	3,674	3,601.96	1	61
Leavenworth	23.64	62,056	2,625.32	28	24	Wyandotte	43.16	156,290	3,621.24	56	62
Lincoln	0.96	3,502	3,647.92	1	64	Kansas	979.26	2,606,468	435,884.60	1,161	

Table E: Density Distribution of Counties

The distribution of counties to one out of five density regions:

URBAN	SEMI-URBAN	DENSELY- SETTLED RURAL	RURAL	FRONTIER
(150 or More)	(40-149.9)	(20-39.9)	(6-19.9)	(Less Than 6)
Douglas	Crawford	Allen	Anderson	Barber
Johnson	Geary	Atchison	Brown	Chase
Sedgwick	Harvey	Barton	Chautauqua	Cheyenne
Shawnee	Leavenworth	Bourbon	Clay	Clark
Wyandotte	Lyon	Butler	Cloud	Comanche
	Montgomery	Cherokee	Coffey	Decatur
	Reno	Cowley	Doniphan	Edwards
	Riley	Dickinson	Ellsworth	Elk
	Saline	Ellis	Grant	Gove
		Finney	Gray	Graham
		Ford	Greenwood	Greeley
		Franklin	Harper	Hamilton
		Jefferson	Haskell	Hodgeman
		Labette	Jackson	Jewell
		McPherson	Kingman	Kearny
		Miami	Linn	Kiowa
		Neosho	Marion	Lane
		Osage	Marshall	Lincoln
		Pottawatomie	Mitchell	Logan
		Seward	Morris	Meade
		Sumner	Nemaha	Morton
			Norton	Ness
			Ottawa	Osborne
			Pawnee	Rawlins
			Phillips	Rush
			Pratt	Sheridan
			Republic	Smith
			Rice	Stanton
			Rooks	Trego
			Russell	Wallace
			Scott	Wichita
			Sherman	
			Stafford	
			Stevens	
			Thomas	
			Wabaunsee	
			Washington	
			Wilson	
			Woodson	